Amendments to the Specification :

Please replace the paragraph beginning at p. 2, line 9, with the following rewritten paragraph:

--To obtain a high quality thin film functional material, the thin layer is typically grown at a growth temperature or annealing temperature of 500C-1000° C. The high growth temperature is required to assure a high quality thin film material. However, the highest temperature that a flexible substrate material can withstand is about 150° C. Therefore, it is generally not possible to obtain the best quality thin film material by growing the material directly on a flexible substrate.--

Please replace the paragraph beginning at p. 2, line 15, with the following rewritten paragraph:

--An optimal solution is to grow the thin film functional material on a first, or growth, substrate, such as silicon, that can withstand the increased temperatures and then transfer the thin film material after it is grown to the flexible substrate. However, there have been problems with isolating, and then transferring, the thin film layer. If the growth substrate is etched away, mechanically lapped, forced, or eliminated from the thin film layer in similar fashion, the risk of damage to the thin film layer during this process is considerable. Further, some growth substrate materials are very expensive, and elimination of the substrate to isolate the thin film layer is cost prohibitive. Once the thin film layer is separated from the growth substrate, there is a second problem. The thin film functional layer must have a smooth surface for the transition and bonding to the second substrate to be successful. Otherwise, the bond to the flexible substrate may not hold properly, and the device will not function optimally.--

Please replace the paragraph beginning at p. 7, line 7, with the following rewritten paragraph:

--Preferably, the flexible substrate further comprises a material selected from a group consisting of stainless steel foil, plastic, ~~polyimide~~ polyimide , polyester, and Mylar.--

Please replace the paragraph beginning at p. 9, line 5, with the following rewritten paragraph:

--There are numerous methods available for carrying out the layer bonding. These bonding methods include conductive polymer adhesive bonding, organic adhesive bonding, indium cold weld bonding, ultrasonic bonding, anodic bonding, reaction bonding, solder glass bonding, frit glass bonding, thermal compression bonding, vacuum bonding, epoxy bonding, silver colloid, graphite colloid, resist bonding, soft solder bonding, or other suitable bonding techniques. Because of limitations of the flexible substrate materials in withstanding heat, it is generally required that the technique used for bonding have a maximum temperature of approximately 150C-200° C. This temperature limitation is specifically true for many organic flexible substrates. However, stainless steel and polyamide substrates can withstand higher bond temperatures --

Please replace the paragraph beginning at p. 9, line 14, with the following rewritten paragraph:

--An optional adhesive layer 18 may be provided between the first substrate 11 and flexible substrate ~~12~~ 16 if needed to provide effective bonding. Some bonding techniques such as ultrasonic bonding or laser bonding may not require the adhesive layer 18.--

Please replace the paragraph beginning at p. 10, line 17, with the following rewritten paragraph:

--Turning to ~~Figures~~ Figure 2a, there is shown an embodiment, which is a modification of the method described herein above. In the embodiments to follow, a thin film functional material layer 12 is grown and transferred to the flexible substrate 16. Because this embodiment and the

remaining embodiments herein are similar to that of Figures 1a-1b, corresponding elements have been given the same reference numerals. In this embodiment, the first substrate 11 is a large diameter growth substrate, as the meaning of the term "large diameter" is understood within the art. Growth substrate materials include silicon, GaAs, quartz, sapphire, or other suitable growth substrate materials. In this embodiment, the growth substrate 11 is silicon. Of the potential growth substrate materials, the material of the most interest is silicon because large diameter silicon substrates can readily be obtained from silicon at low cost --

Please replace the paragraph beginning at p. 11, line 8, with the following rewritten paragraph:

--When silicon is used as the growth substrate material, and as indicated above, silicon is a preferred growth substrate material, some thin film materials such as $SrBaTiO_3$ and $LiNbO_3$ typically would not be grown directly on the silicon growth substrate 11 due to the detrimental effects of reactions between the thin film layer 12 with the silicon of grown substrate 11. In such cases, as typified in this embodiment, the thin film layer 12 is grown on a protective layer 24 located between the thin film layer 12 and growth substrate ~~16~~ 11. Protective layer 24 preferably comprises a platinum layer or iridium layer.--